# ARE YOU PREPARED FOR A FLOOD IN **YOUR NEIGHBORHOOD?**

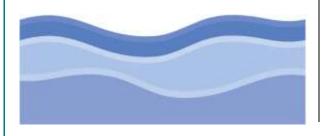
YOU ARE RECEIVING THIS BROCHURE **BECAUSE YOUR PROPERTY IS LOCATED IN** OR NEAR A FLOODPRONE AREA.

# History of Flooding in the City of Charleston

Due to its tidally influenced rivers and streams, and low coastal elevations, the City of Charleston has experienced drainage and flooding problems since its founding. Flooding in the City can be attributed to three sources:

- 1) tidal flooding and storm surge resulting from hurricanes and tropical storms;
- 2) flash flooding resulting from heavy rainfall that overburdens the City's drainage system; and
- 3) riverine flooding resulting from heavy and prolonged rainfall which causes the capacity of river and stream channels to be exceeded.

# Being prepared is your best defense against a flood.



## **How Do You Prepare for a Flood?**



#### Step 1 - KNOW YOUR FLOOD HAZARD

Regulated floodplains are illustrated on inundation maps called Flood Insurance Rate Maps (FIRMs). FIRMs are the official maps for a community on which FEMA has delineated both the Special Flood Hazard Areas (SFHAs) and the risk premium zones applicable to the community. SFHAs represent the areas subject to inundation by the 1-percent-annual chance flood event. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage.

FEMA FIRM maps are available for free public viewing in Charleston County public libraries or online at https://msc.fema.gov/portal. Also, upon request, the City's Floodplain Management staff will make free flood zone determinations for properties located within the City. Please contact floodplaininfo@charleston-sc.gov or (843) 579-6481.

Properties located outside of the SFHA are not guaranteed to be safe from flooding.



# ▲ Step 2 - INSURE YOUR PROPERTY

Flooding is not covered by a standard homeowner's insurance policy. The City of Charleston participates in the National Flood Insurance Program (NFIP) which makes federally backed flood insurance available for all structures in the City regardless of whether or not they are located within a SFHA.

Coverage is available for the building itself as well as its contents. Renters are highly encouraged to purchase flood insurance for their contents. Note that there is a 30-day waiting period before coverage goes into

effect. That means now is the best time to buy flood insurance.

Contact your insurance agency for more information. Additional information can be found online at <a href="https://www.floodsmart.gov">www.floodsmart.gov</a> or by calling 1-888-379-9531.



#### Step 3 - PROTECT YOURSELF AND **YOUR FAMILY**

- Tune-in to local commercial radio or television stations (WIWF - 96.9 FM, WEZL -103.5 FM, WSCI - 89.3 FM) or NOAA weather radio frequencies (162.550 or 162.450). Purchase a Weather Alert Radio for your home and place of employment to help you stay informed of changing conditions.
- If your property is in imminent danger of flooding, contact Dominion Energy at (843) 745-6000 to request that your power or natural gas be shut off or for guidance on how to do it yourself. Teach family members how and when to turn off gas, electricity, and water.
- Never attempt to drive through flooded roadways. Floodwaters can conceal damage underneath, and as little as two feet of running
- water can carry away most vehicles including SUVs.

FLOODED

TURN AROUND

DON'T

- Avoid low-lying areas. Seek shelter in the highest areas possible.
- Develop an evacuation plan for your family. Designate a place where your family will meet after an evacuation order is issued.



#### Step 4 - PROTECT YOUR PROPERTY

Various methods may be used to minimize flooding. If the floor level of your property is lower than the "Base Flood Elevation" (BFE), which is the elevation of the 1% annual chance flood, based on the FEMA maps, consider elevating your structure. Brochures discussing flood proofing and other mitigation measures are available at City offices and in Charleston and Berkeley County public libraries.

If a flood is imminent, protect your property by sandbagging areas subject to the entry of water into living spaces. Move valuables and furniture to higher areas of the dwelling to minimize damages.

The City of Charleston will make site visits to provide one-on-one advice to a property owner regarding flooding and drainage issues on private property. For more information, please contact Stormwater Maintenance at (843) 965-4129.



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All development within the City requires a permit. Always check and fulfill permitting requirements with the Building Inspections Division at (843) 724-7450 and/or the Engineering Division at (843) 724-3782 before you build on, alter, fill, or re-grade any portion of your property and/or within any easement or right-of-way. Also, contact either of the numbers above to report any suspected permitting violations.

The NFIP requires that if a building is substantially improved, meaning the cost of reconstruction, additions. or other improvements equals or exceeds 50% of the building's market value, then the building must meet the same construction requirements as a new building. Substantially damaged buildings must also be brought up to the same standards. For example, a residence damaged so that the cost of repairs equals or exceeds 50% of the building's value before it was damaged must be elevated above the base flood elevation. Please contact the Building Inspections Division at (843) 724-7450 for more information.



#### Step 6 - PROTECT NATURAL **FLOODPLAIN FUNCTIONS**

Floodplains are a natural component of the Charleston environment. Understanding and protecting the natural functions of floodplains helps reduce flood damage and protects water quality. When flooding spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the streambank and channel, deposition of sediments higher in the watershed, and improved groundwater recharge.

Per Section 28-7 of the City's Code of Ordinances, it is illegal to dump anything into any stream channel, pond, basin, or other part of the City's stormwater drainage system. Dumping of materials into our waters or drains pollutes those waters, clogs our storm drains, and leads to flooding in our neighborhoods. Help reduce flooding by taking an active role in keeping trash and debris off the streets and sidewalks and out of streams and ditches. For more information or to report illegal dumping, please contact Stormwater Maintenance at (843) 965-4129.



## Step 7 – PREPARE FOR HURRICANES

Know your evacuation route. The Charleston County Emergency Preparedness Division will order or advise evacuations if conditions warrant this action. If evacuations are called for. it is imperative that you follow instructions in the time frame noted.

The designated hurricane evacuation routes from different areas of the City are as follows:

Downtown: I-26W

West Ashley: SC-61N to US-78W Daniel Island: I-526W to I-26W

Johns Island: Main Road to US-17S to SC-64W

James Island: Folly Road to US-17S to I-526E to I-26W

Questions regarding emergency procedures may be addressed to the Charleston County Emergency Preparedness at (843) 743-7200. For maps of evacuation routes, please consult: www.scemd.org/prepare/know-your-zone.



#### **▲** Step 8 - GENERAL PREPAREDNESS

Inventory and photograph your home's contents and put important papers and insurance policies in a safe place.

Keep an emergency supply of non-perishable food, water, batteries, flashlights, manual can opener, and a battery-operated radio.

If possible, place the washer, dryer, furnace and water heater above potential flood waters. They should be placed on masonry blocks or concrete at least 12 inches above the projected

flood elevation, moved to inside a floodwall or moved to a higher floor. All work Rea must conform to state and local building codes.



For an emergency preparedness checklist, visit www.charlestoncounty.org/departments/emer gency-management/emergency-info.php.



#### Step 9 – PREVENT BASEMENT **FLOODING**

Making low-cost changes in your home now can prevent flood damages later.

- Extend down spouts away from your home and make sure the grade of the yard surface slopes away from the home.
- Clean rain gutters in the spring and fall. Blocked gutters will cause roof water to dump directly against the foundation.
- Seal your foundation and basement walls and install a sump pump.

For more resources on preventing basement flooding, visit www.charlestonsc.gov/1944/Floodplain-Management.



#### Step 10 – REDUCE STORMWATER **FLOODING**

Install Low Impact Development techniques to help manage stormwater on site before it enters the stormwater drainage system.

Use rain barrels under downspouts to collect rainwater. Divert downspouts into rain gardens. Install porous pavement or permeable pavers in walkways and driveways.



Source: Assoc. of Professional Landscape Designers, WA

Contact the City's Stormwater Management staff at (843) 724-3754 for more information.

## For more information about flood safety or the NFIP, please note the following:

www.floodsmart.gov www.ready.gov/floods 1-888-379-9531

of Charleston Floodplain Management Suite 2100

City of Charleston 2 George Street, S Charleston, South

FLOODPLAIN MANAGEMENT